

**APPARATUSES AND METHODS FOR MODELING SHARED BUS  
SYSTEMS**

**ABSTRACT**

5           A software-implemented shared bus system model for modeling a shared bus  
system that includes a plurality of devices interconnected via a shared bus. The  
system model includes a first device model for partially modeling a first one of the  
plurality of devices, the first device model including a first modified logical module  
and a first modified I/O-specific module. The system model further includes a  
10   shareable module having provisioned therein first shareable data. The first shareable  
data is shareable by the first device model and another device model of the plurality of  
device models. The first shareable data represents I/O-specific data associated with  
the first device model that is also needed by the another device model of the plurality  
of device models during configuration of the shared bus system model. The first  
15   shareable data further represents data that would have been provisioned within the  
first device model if the first device model had been configured to closely mimic the  
data content of the first one of the plurality of devices, the first shareable data instead  
being provisioned in the shareable module.

20